Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

- 1. (Currently Amended) A disposable needleless injection device (1)-comprising a body (2)-supporting and/or delimiting a plurality of elements forming a circuit of elements, this circuit comprising, from upstream to downstream, an initiation device associated with a pyrotechnic gas generator, a reservoir (5)-containing a liquid active principle that is to be injected and a system for injecting the active principle, the pyrotechnic gas generator comprising a pyrotechnic charge (62)-placed in a combustion chamber (4), said combustion chamber (4)-being divided into two volumes (V1, V2)-by a wall-(40), these two volumes (V1, V2) being defined, from upstream to downstream, as a first volume (V1)-in which the pyrotechnic charge (62)-is placed and a second volume (V2), the two volumes (V1, V2) communicating via a first device for regulating the pressure level in the combustion chamber (4), said injection device being characterized in that it comprises an expanding membrane (8), initially furled, constituting a sealed wall between the combustion chamber (4)-and the reservoir (5)-of active principle, said membrane (8)-being able, in operation, to deploy under the action of the gases originating from the combustion of the pyrotechnic charge (62).
- 2. (Currently Amended) The device (1) as claimed in claim 1, characterized in that the first device for regulating the pressure level consists of a passage (41) formed through the wall (40).
- 3. (Currently Amended) The device (1)-as claimed in claim 1, characterized in that the pyrotechnic charge (62)-is arranged in a first sub-volume (V10)-of the first volume (V1)-of the combustion chamber-(4), this first sub-volume (V10)-being initially closed.

- 4. (Currently Amended) The device (1) as claimed in claim 3, characterized in that the first sub-volume (V10) of the first volume (V1) of the combustion chamber (4) is separated, by a second device for regulating the pressure level, from a second sub-volume (V11) of the first volume (V1) of the combustion chamber (4) which is situated downstream of the first sub-volume (V10).
- 5. (Currently Amended) The device (1)-as claimed in claim 4, characterized in that the second regulating device consists of a calibrated rupture disk-(61).
- 6. (Currently Amended) The device (1)-as claimed in claim 5, characterized in that the first sub-volume (V10) of the first volume (V1), in which the pyrotechnic charge (62) is placed, is delimited in part by the walls of a cartridge (6)-inserted in the body (2) of the device (1).
- 7. (Currently Amended) The device (1) as claimed in claim 6, characterized in that the pyrotechnic charge (62) is placed in the cartridge (6) between the calibrated rupture disk (61) and a detonator (60) able to initiate the pyrotechnic charge (62).
- 8. (Currently Amended) The device (1)-as claimed in claim 7, characterized in that the cartridge (6)-has the shape of an L-shaped duct in which the pyrotechnic charge (62)-is placed, this duct being blocked off at one of its ends by the detonator (60)-and at its other end by the calibrator rupture disk-(61).
- 9. (Currently Amended) The device (1) as claimed in claim 2, characterized in that the

membrane (8)-deploys into the reservoir (5)-of active principle.

10. (Currently Amended) The device (1) as claimed in claim 9, characterized in that the passage (41) is offset from a longitudinal central axis of the combustion chamber (4) and is formed in such a way as to be as far as possible away from the membrane (8).